REMARKS

I.   STATUS OF THE CLAIMS

Claims 1-3 and 5-21 are currently pending.

II.   REJECTION OF CLAIMS UNDER 35 USC 101

Independent claim 1 recites automatic translation of extracted data to a non-object format. Independent claims 2, 19, 20 and 21 recite automatically building a non-object database. Independent claims 8 and 11 recite automatically inserting extracted data into tables. Independent claims 13 and 16 recite inserting extracted data into tables. Independent claim 17 recites automatically building relational database tables, and loading the tables. Clearly, these recited features are concrete, useful, tangible results. The usefulness of such results can be understood from the Description of the Related Art section of the application.

Moreover, the claims relate to an object model which stores data in a database, and to an object query language. As an example, claim 1 relates to an "object model which stores data in a database". More specifically, as an example, claim 1 recites extracting data directly from the object model using an object query language. Clearly, object models storing data in a database, and an object query language, are computer-related concepts and relate to the technical arts.

Further, various of the claims relate to a graphical user interface (GUI). See, for example, claims 11 and 16. Clearly, a GUI is in the technical arts.

In addition, claim 17 recites "a computer-implemented engine", which is clearly in the technical arts.

Therefore, it is respectfully submitted that the clams relate to the technical arts, and recite concrete, useful, tangible results.

In view of the above, it is respectfully submitted that the rejection is overcome.

III.   REJECTION OF CLIAMS 1-3 AND 5-21 UNDER 35 USC 103 AS BEING
        UNPATENTABLE OVER SHEN (US PATENT NO. 5,937,410) IN VIEW OF
        NG (US PATENT NO. 6,374,256)

Claim 1 recites that the object model stores data in a database, and that the data is automatically extracted *directly* from the object model *using an object query language corresponding to the object model.* See, for example, FIGS. 2 and 3, and the disclosure in paragraphs [0029]-[0041] of the specification.

For example, FIG. 3 discloses an object model 22 which stores data in a database 20.

As shown in FIG. 3, data is automatically extracted *directly* from object model 22 *using an object query language (OQL) corresponding to the object model*. For example, in FIG. 3, please see the line from element 54 to object model 22, with the notation "OQL". This operation in FIG. 3 can be compared to the prior art in FIG. 1 of the present application, where an export engine 34 exports data from database 20, not from object model 22. See, for example, paragraph [0008] of the specification.

Shen discloses the conversion of object oriented models into a database.

However, in Shen, the actual object model is converted. For example, in FIG. 1 of Shen, data input 14 is a file generated from a computer drawing program, and is indicative of identified relationships among database objects. See, for example, the Abstract, and column 3, lines 5-26, of Shen.

Therefore, in Shen, the actual object model is converted. This is different than the present invention as recited, for example, in claim 1, where the object model stores data in a database, and the data is automatically extracted directly from the object model.

Further, since Shen converts the actual object model, it is respectfully submitted that the operations between data input 14, modeler 16 and compiler 20 of Shen do not use an object query language for the conversation in the manner recited, for example, in claim 1 of the present application.

The above-arguments were presented in the Amendment filed August 6, 2004. In response, on page 9 of the outstanding Office Action, the Examiner wrote:

> "Applicant argued that Shen does not use an object query language for the conversion in the manner recited in claim 1 of the present application as amended by the applicant in the response received 8/6/04. In response, the claim 1 is rejected under 35 USC 103(a) as being unpatentable over Shen in view of Ng."

Moreover, on page 3 of the Office Action, the Examiner conceded that "Shen does not explicitly teach using an object query language to extract data from the object model."

Therefore, from the Examiner's comments, it appears that the Examiner agrees that Shen, by itself, does not disclose that data is automatically extracted *directly* from object model 22 *using an object query language (OQL) corresponding to the object model*, as recited, for example, in claim 1.

However, on page 3 of the Office Action, the Examiner asserts that Ng teaches extracting data from an object model using an object query language corresponding to the object model.

Ng discloses that indexes are generated in a database corresponding to object-oriented classes. See, for example, the Abstract, of Ng.

For example, referring to FIG. 1 of the present application, Ng relates to creating indexes in database 20 using object model 22. The operation disclosed in Ng is significantly different than that recited, for example, in claim 1, where data is automatically extracted directly from the object model using an object query language corresponding to the object model. Moreover, the operation disclosed in Ng is significantly different than that shown, for example, in FIG. 3 of the present application, where data is automatically extracted directly from object model 22 using an object query language (OQL) corresponding to the object model.

Accordingly, it is respectfully submitted that neither reference, taken individually or in combination, discloses or suggest the present invention as recited, for example, in claim 1.

Although the above comments are specifically directed to claim 1, it is respectfully submitted that the comments would be helpful in understanding various differences of various other claims over the cited references.

* * *

Differences between various embodiments of the present invention and Ng can further be understood by referring to claim 3 of the present application. More specifically, claim 3 recites that the non-object database is a relational database. Therefore, in the present invention as recited, for example, in claim 3, an object model stores data in a database (for example, a first database). A non-object database (for example, a second database) is automatically built from data extracted directly from the object model using an object query language corresponding to the object model. According, in the present invention as recited, for example, in claim 3, two databases are required. The invention of Ng simply creates indexes for one database. See, for example, FIG. 5 of Ng. Accordingly, it is respectfully submitted that the overall nature of the present invention as recited, for example, in claim 3, is substantially different than Ng.

Although the above comments are specifically directed to claim 3, it is respectfully submitted that the comments would be helpful in understanding various differences of various other claims over the cited references.

Please note that claims 8, 11, 13, 16, 20 and 21 include specific recitations relating to more than one database.

* * *

Claim 11, 13 and 16 recite automatically building tables for the extracted data in accordance with metadata for the extracted data.

Ng does not disclose or suggest automatically building tables for the extracted data in accordance with metadata for the extracted data

Instead, Ng discloses an object mapping tool 508 that requires predetermined class-to-database mapping between classes and tables. See, for example, column 7, lines 65-66, and column 11, lines 20-22, of Ng. Column [0008] of the present application specifically addresses problems associated with this type of conventional "mapping" in Ng. Further, as Ng relates to the convention mapping as addressed in column [0008] of the present application, Ng can be seen as "teaching away" from automatically building tables for the extracted data in accordance with metadata for the extracted data as recited, for example, in claims 11, 13 and 16.

In view of the above, it is respectfully submitted that the rejection is overcome.
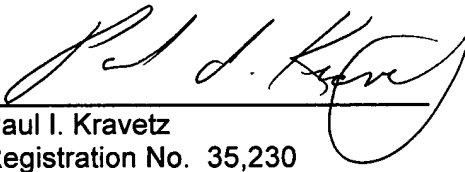
IV.   CONCLUSION

In view of the above, it is respectfully submitted that the application is in condition for allowance, and a Notice of Allowance is earnestly solicited.

If any further fees are required, please charge such fees to our Deposit Account No. 19-3935.

Respectfully submitted,

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